health talk **S**



How to Help Your Chronic Back and Knee Pain

By Dr. Paul Oh *BKin, DC*

A key factor to many low back and knee issues are due to the overuse and under-utilization of our hips.

WHERE ARE YOUR HIPS?

When I ask this question to many of my patients, they will commonly point to their pelvis. Your hips are lower down. It is where the bone of your thigh (femur) meets your hip socket (acetabulum). This is an important distinction when learning to move well with good movement patterns.

During a physical examination, I will test various movement patterns. This provides a window into how someone will move in his or her daily lives. One pattern that is commonly tested is the squat. The squat is a primal pattern that we all use in life. We develop a squat as babies and continue to use it throughout our lives. It is how we get to the ground to pick things up, to play with our kids and do our gardening.

WHAT IS THE RIGHT WAY TO SQUAT?

There are two ways you can move through a squat. The first is through knee dominance where the knees will bend first and most of the squat movement will occur around our knees. The second is a hip dominant movement where the hips will shift back and drop down. In reality, you will use both your hip and knees fairly equally but the problem is that we use our knees too much.

We are pre-programmed to develop a hip dominant squat. As babies we all learned to squat this way without anybody telling us. We sat in this position as we played for hours and hours. Somewhere along the way we lose this pattern.

In our generation, the hip dominant squat is becoming more rare due to the nature our work. We live in an era of sedentary occupations where we sit in front of a computer or desk for 8 hours a day. We sit in chairs that are at 90-degree angles and you never have to go below that. As a result, our squat pattern seems to change from

the hip dominant version we learned as babies to a knee dominant version as adults.

People who live in nations who have hip dominant squats move this way because they have to. They may not have the luxuries of sitting in a chair so they learn rest in this position for extended periods. This is the norm for those in many Asian and African countries. I guess the adage holds true, if you don't use it, you will lose it.

One key in my success when dealing with chronic knee and low back patients is teaching better movement patterns of every day life. The squat is one example of how we move too much with our knees and not enough with our hips. Other movement patterns include: stair climbing, lifting, lunging, jumping, and landing. Teaching patients how to move more efficiently will allow them not to overload structures, train better and become more effective at their sport or activities of choice.

Please note that the hip dominant movement may not be appropriate in all cases. For example, there are those who have severe degeneration in their hips. However, changing the previously mentioned movement patterns toward hip dominance will work in most cases.

Also, you need the requisite mobility at each joint (hips, knees and ankles) to get into a full depth squat. One way to check is to lie on your back and simulate the squat position. After getting the requisite mobility you to train the motor pattern or how your brain sequences which muscles to fire. This can get fairly complex and will require a trained health professional to guide you through it.

WHAT CAN I DO TODAY TO HELP WITH MY BACK AND KNEE PAIN?

Call or drop by Form and Function and book a consultation with Dr. Paul Oh.





